

Notice of Allowability

Application No.

10/003,390

Applicant(s)

JEONG ET AL.

Examiner

Art Unit

Christine T. Tu

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/24/2005.
2. ☒ The allowed claim(s) is/are 1-4,6-8 and 10-34.
3. ☒ The drawings filed on 5/24/2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

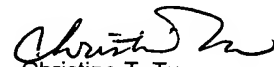
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Christine T. Tu
Primary Examiner
Art Unit: 2133

Replacement Sheet

The block diagram illustrates the internal architecture of a memory system, organized into several functional blocks and their interconnections:

- Block 110 (Global Buffer & Control Buffer):** Receives external control signals: \overline{CLE} , \overline{ALE} , \overline{nCE} , \overline{nRE} , and \overline{nWE} . It outputs $CMD[7:0]$ to the Command Register (120), $XAD[7:0]$ to the Row Address Buffer/Decoder (130), $YAD[7:0]$ to the Column Address Buffer/Decoder (140), and $DI[7:0]$ to the Expected Data Input Buffer (190).
- Block 120 (Command Register):** Outputs FD and FR signals.
- Block 130 (Row Address Buffer/Decoder):** Receives $XAD[7:0]$ and outputs $XA[n:0]$ to the Row Decoder (150).
- Block 140 (Column Address Buffer/Decoder):** Receives $YAD[7:0]$ and outputs $YA[m:0]$ to the Column Select (170).
- Block 150 (Row Decoder):** Receives $XA[n:0]$ and outputs to the Cell Array (100).
- Block 160 (Page Buffer/Latch):** Receives $YA[m:0]$ and outputs to the Cell Array (100).
- Block 170 (Column Select):** Receives $YA[m:0]$ and outputs to the Cell Array (100).
- Block 100 (Cell Array):** The central memory array, receiving inputs from the Row Decoder (150), Page Buffer/Latch (160), and Column Select (170).
- Block 180 (Data Input/Output Control):** Receives $DI[7:0]$ and outputs $DS[7:0]$ to the Fail Bit Detection (200).
- Block 190 (Expected Data Input Buffer):** Receives $DI[7:0]$ and outputs $DEX[7:0]$ to the Fail Bit Count/Latch (210).
- Block 200 (Fail Bit Detection):** Receives $DS[7:0]$ and outputs $FF[1:0]$ to the Fail Bit Count/Latch (210).
- Block 210 (Fail Bit Count/Latch):** Receives $FF[1:0]$ and outputs $FS[7:0]$ to the Data Output Buffer (220).
- Block 220 (Data Output Buffer):** Receives $FS[7:0]$ and outputs data signals FD , FR , and \overline{nRE} .